A tile membrane for use on sealed concrete is a specialized underlayment—such as an uncoupling mat or anti-fracture sheet—installed between the concrete slab and the tile. It absorbs lateral movement and stress, preventing concrete cracks from transferring up to the finished tile, while providing waterproofing and vapor management. Polyguard +6

Key Functions of Tile Membranes

- **Crack Isolation:** Dissipates lateral stresses from shifting or shrinking concrete so hairline cracks do not telegraph through to the ceramic or stone tile. Polyguard
- **Uncoupling:** Allows the tile layer and the concrete subfloor to move independently from one another without putting shear stress on the tile bonds. Making Pretty Spaces +1
- **Waterproofing:** Acts as a protective barrier against moisture intrusion to safeguard assemblies or rooms below.

Important Considerations on Sealed Concrete

- **Surface Preparation:** Thin-set mortar will not bond to a sealed or glossy concrete surface. The sealant must be mechanically abraded (scraped, sanded, or shot-blasted) or chemically stripped to ensure the mortar can securely grip the raw concrete underneath.
- **Product Examples:** Popular sheet systems like Schluter-DITRA or MAPEI Mapeguard UM 35 provide these combined uncoupling and protective layers.